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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/074,201

02/12/2002

Nicholas P. Wilt

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07/27/2004

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EXAMINER

MONESTIME, MACKLY

ART UNIT

PAPER NUMBER

2676

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,201

Applicant(s)

WILT, NICHOLAS P.

Examiner

Mackly Monestime

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-18 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Amendment

1. The amendment received on June 9, 2004 has entered and carefully considered. Claims 1-16 and newly added claims 17-18 are still pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view Sasaki et al (US Patent No. 6,549,948).
4. As per claims 1, 5-6, 9 and 15-16, AAPA substantially disclosed the invention as claimed included a method for a display source to regulate a rate of production by the display source of information for display on a display device (Fig. 1A; Items No. 106, 102), the display source associated with a display memory set, the display device associated with a presentation surface set distinct from the display memory surface set (Fig. 1A; Items No. 106, 102, 104).

AAPA did not explicitly disclose the steps of: receiving notification of an estimated time when a future frame will be displayed on the display device, preparing display information in the display memory surface associated with the display source, the preparing based on the estimated time, and releasing the display information for display on the display device. However, Sasaki et al disclosed receiving notification of

an estimated time when a future frame will be displayed on the display device (col. 16, line 9), preparing display information in the display memory surface associated with the display source, the preparing based on the estimated time, and releasing the display information for display on the display device (col. 15, lines 55-67; col. 16, lines 50-54; and col. 18, lines 18-36). It would have obvious to one of ordinary skill in the art at the time the invention was made to combined the teachings of Sasaki et al with the teachings of AAPA because doing so would provide an information processing apparatus capable of displaying a moving image in a smoother manner by estimating the display time of a next frame based on the required display times of the preceding frames.

5. As per claim 2, AAPA disclosed that the display source is in the set: application program, driver, and operating system (Fig. 1E, page 7, lines 7-8; page 8, lines 26-28).

6. As per claims 3-4, AAPA disclosed preparing display information comprises preparing display information in a back buffer in a flipping chain of the display memory surface set associated with the display source and wherein releasing comprises making the back buffer into a ready buffer in the flipping chain of the display memory surface set (Fig. 1D; Items No. 110, 112, 114 and 116).

7. Claims 10-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Bates et al (US Pat. No. 6,760,048).

8. As per claims 10 and 14, AAPA substantially disclosed the invention as claimed included a method for a display source to regulate a rate of production by the display source of information for display on a display device (Fig. 1A; Items No. 106, 102), the

display source associated with a display memory set, the display device associated with a presentation surface set distinct from the display memory surface set (Fig. 1A; Items No. 106, 102, 104).

AAPA did not explicitly disclose the steps of: receiving occlusion information indicating that at least portion of the display information will be occluded on the display device, wherein the occlusion information is based at least in part upon display information from a different display source and if at least a portion of the display information will not be occluded, then preparing non-occluded portions of the display information, and not preparing occluded portions of the display information, and releasing the display information for display on the display device. However, Bates et al disclosed receiving occlusion information indicating that at least portion of the display information will be occluded on the display device, wherein the occlusion information is based at least in part upon display information from a different display source and if at least a portion of the display information will not be occluded, then preparing non-occluded portions of the display information, and not preparing occluded portions of the display information, and releasing the display information for display on the display device (Abstract, lines 1-7; col. 2, lines 53-57 and col. 17, lines 20-26). It would have obvious to one of ordinary skill in the art at the time the invention was made to combined the cited references because doing so would enhance the processing speed of the computer system by eliminating the unnecessary processing of the occlude display information.

9. As per claim 11, AAPA disclosed that the display source is in the set: application program, driver, and operating system (Fig. 1E, page 7, lines 7-8; page 8, lines 26-28).

10. As per claim 12-13, AAPA disclosed preparing display information comprises preparing display information in a back buffer in a flipping chain of the display memory surface set associated with the display source and wherein releasing comprises making the back buffer into a ready buffer in the flipping chain of the display memory surface set (Fig. 1D; Items No. 110, 112, 114 and 116).

11. As per claims 17 and 18, AAPA disclosed that the different display source is a downstream display source (Fig. 1A, Items No. 102 and 106).

Allowable Subject Matter

12. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The prior art of record further failed to teach or disclose either singularly or in combination a method for a display source to provide information for display on a display device; wherein the method further comprises the steps of: "receiving notification of a time when a frame was displayed on the display device, the frame containing at least a portion of the released display information; comparing the received estimated time to the received display time; and if the received display time is later than the received estimated time, then taking corrective action" (as per claim 7). These distinct steps of the present claim invention have not found to be anticipated, suggested or made obvious by the prior art of record.

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2676

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monestime

Patent Examiner

July 8, 2004

Matthew C. Bella

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600